CLAIMS

WHAT IS CLAIMED:

5   1.   A method of controlling recursion at system startup, the method comprising creating one or more levels of device tree nodes branching from a root node, wherein the number of levels of device tree nodes is equal to a recursion depth.

2.   The method of claim 1, wherein the recursion depth is a property published by
10 the root node and the one or more levels of device tree nodes.

3.   A method of controlling recursion at system startup, the method comprising:

incrementing a recursion level; and

creating a level of device tree nodes branching from a root node or another

15   level of device tree nodes, wherein the recursion level is less than a

recursion depth.

4.   The method of claim 3, further comprising initializing the recursion level at the root node to zero.

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5.   The method of claim 3, wherein the recursion level is a property published by the root node and the level of device tree nodes.

6. The method of claim 3, wherein the level of device tree nodes inherits the recursion level from its parent node.

7. The method of claim 3, wherein incrementing the recursion level comprises incrementing the recursion level by one.

8. A method of controlling recursion at system startup, the method comprising:

initializing a recursion level;

creating a level of device tree nodes;

incrementing the recursion level; and

comparing the recursion level to a recursion depth and discontinuing the process of incrementing the recursion level and creating the level of device tree nodes in response to the recursion level being equal to the recursion depth.

9. The method of claim 8, wherein initializing the recursion level comprises initializing the recursion level at the root node to zero.

10. The method of claim 8 wherein incrementing the recursion level comprises incrementing the recursion level by one.

11. The method of claim 8, wherein the recursion level is a property published by the root node and the level of device tree nodes.

12. The method of claim 8, wherein the recursion level is a property inherited by the level of device tree nodes from its parent.

13. An article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to create one or more levels of device tree nodes branching from a root node, wherein the number of levels of device tree nodes is equal to a recursion depth.

14. The article of claim 13, wherein the recursion depth is a property published by the root node and the one or more levels of device tree nodes.

15. An article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to increment a recursion level and create a level of device tree nodes branching from a root node or another level of device tree nodes, wherein the recursion level is less than a recursion depth.

16. The article of claim 15, wherein the instructions when executed enable the processor to initialize the recursion level at the root node to zero.

17. The article of claim 15, wherein the recursion level is a property published by the root node and the level of device tree nodes.

18. The article of claim 15, wherein the level of device tree nodes inherits the recursion level from its parent node.

19.   The article of claim 15, wherein the instructions when executed enable the processor to increment the recursion level by one.

5   20.   An article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to initialize a recursion level, create a level of device tree nodes, increment the recursion level, and compare the recursion level to a recursion depth and discontinue the process of incrementing the recursion level and creating the level of device tree nodes in response to the recursion level being equal to the recursion depth.

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21.   The article of claim 20, wherein the instructions when executed enable the processor to initialize the recursion level to zero.

15   22.   The article of claim 20, wherein the instructions when executed enable the processor to increment the recursion level by one.

23.   The article of claim 20, wherein the recursion level is a property published by the root node and the level of device tree nodes.

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24.   The article of claim 20, wherein the recursion level is a property inherited by the level of device tree nodes from its parent.

25.   An apparatus, comprising:

a storage unit adapted to store a recursion control process; and

a control unit adapted to execute the recursion control process, wherein the recursion control process causes the control unit to control recursion during system startup.

26.   The apparatus of claim 25, wherein the recursion control process is encoded within an FCode module.

27.   The apparatus of claim 26, wherein the FCode module comprises instructions to be executed during system startup.

28.   The apparatus of claim 26, wherein the FCode module is located on an internal memory of a USB device.

29.   The apparatus of claim 25, further comprising a USB interface adapted to interface with one or more Universal Serial Bus (USB) devices.

30.   The apparatus of claim 25, further comprising an operating system adapted to configure one or more devices.

31.   The apparatus of claim 30, wherein the operating system comprises a device driver.